

NYISO Capacity Market Enhancements

Advanced by New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., City of New York, Luthin Associates for Refined Sugars, Inc., Columbia University, New York University, New York Presbyterian Hospital, Beth Israel Health Care System, Mount Sinai Medical Center, Long Island Power Authority, New York State Consumer Protection Board, and Multiple Intervenors¹

Introduction

Extensive discussions have occurred regarding the current NY capacity market. Market participants, the NYISO, the Department of Public Service and Governmental Representatives have all voiced concern that the current markets do not provide efficient pricing signals for maintaining existing capacity or incenting the development of new capacity resources required to meet reliability needs. To date, some market participants have put forth a proposal to utilize an administratively determined demand curve to solve potential market concerns. Leaving aside the perceived problems associated with the NY capacity markets, as well as the current financial problems in the energy sector, this paper presents a two-tiered proposal for enhancements to the NY capacity market that are aimed at ensuring reliability, providing efficient incentives for new capacity supply², and moving toward a more economically rational capacity market.

The capacity market enhancements described herein are being proposed as an immediate effort to move toward a more rational capacity market. Under this proposal, the ISO would implement certain changes immediately and work with market participants during the coming months to finalize the details required to implement the remaining concepts laid out below.

Obligation Procurement Period

The first proposed enhancement is to move back to a six month obligation procurement period (OPP) for the summer of 2003, which is May 1 through October 31, 2003, with an extension to a one-year OPP as soon as practicable. Monthly auctions would no longer be conducted. Capacity would be sold and procured based on Summer Dependable Maximum Net Capability (DMNC) ratings. The use of winter DMNC ratings in certain circumstances is discussed below.

¹ As of January 27, 2003. The market participants advancing this proposal are advancing it as a package for consideration by the NYISO and the ICAP WG. These market participants individually may also (i) choose to support or oppose a demand curve, or (ii) choose to support or oppose any or all of the individual elements, or both.

² For the purposes of this proposal, capacity supply includes Special Case Resources and other qualifying demand response, as appropriate.

The second tier enhancement is that during the coming months, the ISO would develop the details for extending the OPP to one year. The ISO would, with market participants, develop alternatives for a one-year OPP. In evaluating the alternatives, the ISO will take into consideration which alternative will minimize seams. One alternative would be to align the one-year OPP with the capability year that is presently defined as May 1 to April 30. Another alternative would be to have the one-year OPP track the calendar year (*i.e.*, January 1 – December 31)³. Finally, as a third alternative, the ISO could align the one-year OPP with the Summer procurement period in PJM (*i.e.*, begin on June 1). Further discussions during the coming months are required to determine the preferred option, and when any option could be implemented so as to define the appropriate transition process.

The proposal outlined herein begins by revising the NY capacity market back to the six-month OPP that the NYISO started with to cover the Summer 2003 capability period. This would then leave either a full six-month winter capability period or the last two months of 2003 to deal with in transition to the one-year OPP⁴.

Retail Access and New Capacity Supply Accommodations

Due to the OPP being longer than one month, accommodations for both the month-to-month load shifts that occur under New York's retail access program and new capacity supply that becomes available during the term of any OPP, must be made.

Each LSE would handle month-to-month load shifts through a monthly swap of the remaining capacity obligation. LSEs that gain load would take on the remaining capacity obligation from LSEs that lose load through a monthly reassignment facilitated by the NYISO. The capacity would change hands at a monthly prorated price based on the most recent OPP auction (whether one-year or six-months).

New capacity would be eligible to participate in the capacity market through bilaterals during the six month OPP in the summer of 2003. Any LSE contracting for such new capacity would take the risk of its delivery. For subsequent OPPs (whether one-year or six-months), new capacity supply would be eligible to participate through the auction as well as through bilaterals. Appropriate penalties, credit requirements, and milestones to ensure the new capacity is available when promised would be determined during the coming months.

³ A calendar year based requirement would require a conforming change to the NYSRC annual Installed Reserve Margin development process.

⁴ If a June 1 date is used an additional month of transition is required. Regardless of the transition process, issues related to the use of Winter DMNC ratings during the transition period, as well as the long term, remain to be decided.

Deficiency price to be revised to 1.5 times the cost of a new GT

With longer-term procurement, the need for a higher deficiency charge is limited as there is a more rational approach to ensuring reliability and meeting capacity requirements. Therefore, the capacity deficiency price is revised to 1.5 times the cost of a new GT.

In-City Price cap implementation

The \$105/kW-year in-city price cap would be implemented in two parts, summer and winter, if a two-capability period year is implemented. If Summer DMNC ratings are used in both six-month capability periods, the price caps would be \$52.50/kW/six-month period. If a one-year period is implemented, a single annual \$105/kW-year price cap may be implemented.

Capacity Rating Mechanism

A generating unit's capacity that can be sold to satisfy the New York capacity requirements is defined as the unit's Dependable Maximum Net Capability (DMNC). Currently DMNCs are determined twice a year covering the summer and winter capability periods. Under the current market rules the summer and winter DMNCs are used in the respective capability periods. The ratings are determined using a target temperature for the summer or winter period, respectively.

For the immediate change to a six month OPP, no change in the capacity rating mechanism is recommended.

In conjunction with moving to an annual OPP, the market would use the summer DMNC to reflect the quantity of supply available for each facility. The use of the Summer DMNC rating is naturally aligned with an annual requirement because a supplier offering to provide energy during every day of the annual period would be restricted by the summer rating as that is the maximum amount that it can assure supplying during the OPP.

A six-month or annual market with summer-only DMNC, however, has important implications for the availability and price of capacity in the winter including the potential of a shortage of capacity in the winter due to units that decide to offer capacity only in the summer period. There are several potential solutions to this problem (two of which are outlined below) that would be further evaluated through the ISO committee process during the upcoming summer OPP.

DRAFT FOR DISCUSSION PURPOSES ONLY

POTENTIAL SOLUTIONS:

1. One alternative would be to cap the amount of supply at the summer-only DMNC level for both the summer and winter capability periods. Additional winter capacity would be allowed only as a replacement for summer-only capacity. The amount of winter excess would be limited to the equivalent summer amount, making both markets behave similarly, while allowing a different mix of specific units when needed. For example:

	Summer	Winter*
Unit	MW Bid <i>(based on Summer DMNC Rating)</i>	MW Bid
1	300	300
2	400	0
3	500	500
4	600	600
5	-	100
6	-	300
TOTAL:	1800	1800

*Use of incremental winter capacity as a result of winter DMNC could be included. The amount is subject to review.

2. Another alternative is to conduct the annual auction in two periods, summer and winter with summer setting the annual price. Suppliers who bid annually would receive the full price. Suppliers who bid in the summer only would receive the summer price for six months. Temperature sensitive capacity would bid separately their additional winter capacity. Suppliers who bid winter only will receive a prorated price based on winter excess if their volumes exceed the summer capacity.

DRAFT FOR DISCUSSION PURPOSES ONLY

For example, suppliers could combine with each other to form an annual product or the NYISO could accomplish the matching through an auction process. A combination of suppliers that could provide capacity in an annual market would be a supplier that offers its summer DMNC capacity in the summer combined with a supplier that sells its summer DMNC capacity in the winter. These units may sell the converse in other markets or through other mechanisms.

Option 2

Unit**	Summer		Winter*		TOTAL
	MW Bid	Revenue	MW Bid	Revenue	
		(at \$30/kW-yr clearing price)		(at \$30/kW-yr clearing price)	
	Summer DMNC Rating)	(\$000)		(\$000)	
1	300	\$ 4,500	300	\$ 4,500	\$ 9,000
2	400	\$ 6,000	0	\$ -	\$ 6,000
3	500	\$ 7,500	500	\$ 7,500	\$ 15,000
4	600	\$ 9,000	600	\$ 9,000	\$ 18,000
5	-		100	\$ 1,000	\$ 1,000
6	-		300	\$ 3,000	\$ 3,000
7	-		200	\$ 2,000	\$ 2,000
TOTAL:	1800	\$ 27,000	2000	\$ 27,000	\$ 54,000

*Use of incremental winter capacity as a result of winter DMNC could be included. The amount is subject to review.

**Units may be additional units or additional capacity from existing units

Procurement Process

The ISO has indicated that it is concerned about the test procedures currently used to determine a unit's DMNC. Any solution must be determined concurrently with an evaluation of the DMNC testing procedures. The NYISO would separately evaluate the winter DMNC ratings to ensure that any incremental winter capacity is available to meet load requirements through the winter period consistent with reliability requirements. Once this is resolved, the process will allow incremental temperature sensitive capacity to participate in the a process which attempts to match the additional winter supply of generating capacity with (i) summer only capacity suppliers into NYISO, (ii) newly constructed resources, or both..

Under this proposal the NYISO would run a mandatory auction for all annual capacity requirements. This mandatory auction would not preclude bilateral contracts. The holders of these instruments would simply bid report the amounts contracted for under contracts to the NYISO to match the holders' purchase requirements.

The key benefit of the mandatory auction is that it would enable resources that are only available during portions of the year, e.g. summer resources from winter peaking regions such as Canada, or newly constructed resources that are placed in service part way

through the OPP, to be combined to create a portfolio meeting the annual supply requirements.

Mitigation and Market Monitoring

During the coming months, the NYISO will consider whether modifications to the mitigation and monitoring capability of the NYISO are appropriate to ensure that market power is not exercised in the capacity market.